



**Fw: AAPG Eastern Section Meeting Short Course on Induced Seismicity**

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I attended a short course titled "Induced Seismicity: Potential from Injection/SWD Operations and from Hydraulic Fracturing" on September 22<sup>nd</sup> at the AAPG Eastern Section Conference held in Cleveland. See attached for the course slides and related material from the National Academy of Sciences. The course attendance was roughly 25 people representing interests from government, industry and academia. Several interesting notes from the course:

- Only two documented cases of induced seismicity resulting from hydraulic fracturing: Blackpool England and British Columbia.
- Microseismicity was proposed to be anything under a magnitude 3 event as below this an earthquake is difficult to feel. Nothing would be considered an "earthquake" unless it exceeded a magnitude 3. Obviously from a state perspective if the governor's phone starts ringing it is a seismic event. Other people I talked to later at the AAPG meeting varied in their definitions from minus 3 to 1 order of magnitude as the upper limit for microseismicity. And
- At the operations in California where injection is used for geothermal energy production, there has been over the years the development of operational

standards to limit the seismic events (micro or earthquakes) to below the level found objectionable to the local population.

If you have any questions please let me know.

Thanks  
Lindsay

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